

FORMALITIES

An Information Disclosure Statement (the "IDS") including a Certificate pursuant to 37 CFR 1.97(e) was filed on December 11, 2003. Receipt of the IDS was acknowledged by a return receipt postcard that was date stamped on December 15, 2003. The Applicants respectfully request that the Examiner consider the references contained in the IDS in considering this response and provide the Applicants with a copy of the Form PTO-1449 that has been duly initialed.

REMARKS

Claims 1 through 52 are pending in the subject application. Claims 13-35 have been withdrawn from prosecution. Claims 1, 3, 4, 6, and 9-11 stand rejected under 35 USC 102(b). Claims 1, 2, 4, 5, 7, 38, and 39 stand rejected under 35 USC 102(e). Claims 5, 8, 12, and 37 stand rejected under 35 U.S.C. 103(a). Claims 40-52 stand rejected under 35 USC 112, first paragraph. Claims 1 and 39 have been amended. Claim 36 has been canceled without prejudice.

The Applicants appreciate the Examiner's thorough examination of the subject application. However, the Applicants respectfully request reconsideration of the subject application based on the above amendments and the following remarks.

35 U.S.C. § 112, FIRST PARAGRAPH REJECTIONS

The Examiner has rejected claims 40-52 under 35 USC § 112, first paragraph for failing to comply with the written description requirement. Specifically, the Examiner asserts that, the recitation "the object to be cleaned is not immersed or submerged in a cleaning solution" constitutes new matter because the limitation is not supported in the specification. The Applicants respectfully traverse this ground for rejection.

In the Background of the Invention section of the specification, the Applicants describe and contrast "shower cleaning", in which an aqueous cleaning agent is blown through a nozzle at the substrate, and "soaking", in which a substrate is immersed or submerged in an overflow vessel. See, e.g., Specification, page 12, lines 4-15. A problem noted about "soaking" is that removed dust particles may redeposit onto the substrate surface. See, e.g., Id., page 13, lines 18-23.

The present invention, however, clearly provides "shower cleaning", which, by definition, requires cleaning in a state that is neither immersed nor submerged in an aqueous cleaning solution. Specifically, the present invention comprises ultrasonic nozzles 2, which blow aqueous cleaning agent against the lower surface of the substrate, and shower nozzles 3, which supply aqueous cleaning agent to shower clean the upper surface of the substrate. See, e.g., Id., page 20, lines 9-21 and page 18, lines 6-8.

More specifically, the shower nozzles "shower clean", i.e., spray, and rinse the upper substrate, see, e.g., Id, page 22, lines 6-22 and page 25, lines 11-21, which only wets the upper surface. See, e.g., Id., page 24, lines 22-25. High-pressure spray cleaning, further, provides "spray cleaning" to dislodge contamination adhering to the surface of the substrate. See, e.g., page 37, line 10 to page 38, line 2. "Shower-" or "spray cleaning" is not an immersion type cleaning process and nowhere in the specification is cleaning by immersion in an aqueous cleaning solution mentioned. Moreover, none of the drawings or original claims suggest immersing the substrate or that immersion is contemplated or feasible with the claimed structure.

Accordingly, the Applicants respectfully maintain that, there is adequate disclosure in the specification to support the limitation language of claim 42, et seq., which is to say that, the object to be cleaned is neither submerged nor immersed in an aqueous cleaning solution. Therefore, the Applicants believe that, the claims are allowable. Moreover, it is respectfully submitted that the subject application is in condition for allowance. Early and favorable action is requested.

35 U.S.C. § 102(b) REJECTIONS

The Examiner has again rejected claims 1, 3, 4, 6, and 9-11 under 35 USC § 102(b) as being anticipated by Japanese Laid-Open Published Patent Application Number 06-005577 (the "Japan Reference"). The Applicants respectfully traverse these rejections based on the above amendments and the following remarks.

Claim 1 has been amended to include the limitation of claim 36, which the Examiner admits is allowable. Accordingly, it is respectfully submitted that, claim 1 and all claims depending therefrom are not anticipated by the Japan reference, and further, satisfy all of the requirements of 35 U.S.C. 100, et seq., especially § 102(b). Accordingly, the claims are allowable. Moreover, it is respectfully submitted that the subject application is in condition for allowance. Early and favorable action is requested.

35 U.S.C. § 102(e) REJECTIONS

The Examiner has again rejected claims 1, 2, 4, 5, 7, 38, and 39 under 35 USC § 102(e) as being anticipated by U.S. Patent Application Number 6,385,805 to Konishi ("Konishi" or the "Konishi Reference"). The Applicants respectfully traverse these rejections based on the above amendments and the following remarks.

Claim 1 has been amended to include the limitation of claim 36, which the Examiner admits is allowable. Accordingly, it is respectfully submitted that, claim 1 and all claims depending therefrom are not anticipated by the Konishi reference, and further, satisfy all of the requirements of 35 U.S.C. 100, et seq., especially § 102(e). Accordingly, the claims are allowable. Moreover, it is respectfully submitted that the subject application is in condition for allowance. Early and favorable action is requested.

35 U.S.C. § 103(a) REJECTIONS

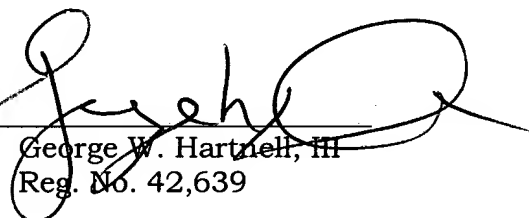
The Examiner has again rejected claims 5 and 12 under 35 USC 103(a) as being unpatentable over the Japan reference and claims 8 and 37 under 35 USC 103(a) as being unpatentable over the Konishi reference in view of U.S. Patent Number 6,292,972 to Ishihara. The Applicants believe that these rejections are moot in view of the above amendments.

Therefore, it is respectfully submitted that, claims 5, 8, 12, and 37 are not made obvious by the Japan reference and/or the Konishi reference in view of the Ishihara reference, and further, satisfy all of the requirements of 35 U.S.C. 100, et seq., especially § 103(a). Accordingly, claims 5, 8, 12, and 37 are allowable. Moreover, it is respectfully submitted that the subject application is in condition for allowance. Early and favorable action is requested.

The Applicants believe that no additional fee is required for consideration of the within Response. However, if for any reason the fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge Deposit Account No. **04-1105**.

Respectfully submitted,

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